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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,068	12/11/2003	Oskar Pacher	0329-0049	7818
<div>7590 09/11/2007</div> <div>Cook, Alex, McFarron, Manzo, Cummings & Mehler, Ltd. Suite 2850 200 West Adams Street Chicago, IL 60606</div>				
			EXAMINER ROE, JESSEE RANDALL	
			ART UNIT 1742	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/733,068	Applicant(s) PACHER ET AL.	
	Examiner Jessee Roe	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-19 and 32-40 is/are pending in the application.
- 4a) Of the above claim(s) 8-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

Claims 8-19 and 32-40 are pending wherein claims 32-40 are new; claims 8-19 are withdrawn from consideration; and claims 1-7 and 20-31 are canceled.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 32-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 32, it is not clear from the claim language "and/or" what elements are required and what elements are optional.

Claims 33-40 are rejected because they depend from claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ball (US 5,471,751) in view of Kishida et al. (US 4,729,872) and Grazen (US

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3,061,525).

In regards to claims 32 and 33, Ball ('751) discloses guide bars (an article) for chain saws with an increased useful life that would be resistant to embrittlement that would be either laminated from three thin plates (support bands) that are joined by spot welding or adhesives, or solid from one thick plate (col. 1, lines 7-33). Ball ('751) further discloses that the guide bars (the support bands) would be made of steel and a nickel layer and a chromium layer with organic additives would be used to coat the steel via an electrolytic bath (col. 2, lines 22-36). However, Ball ('751) does not specify the type of steel that would be used or the type of organic additives.

Kishida et al. ('872) disclose tool steel having a composition in comparison with that of the instant invention as shown in the table below (col. 4, line 15 – col. 5, line 42).

Element	From Instant Claims (in weight percent)	Kishida et al. ('872) (in weight percent)	Overlapping Range (in weight percent)
C	0.25-0.35	0.10-0.70	0.25-0.35
Si	0.30-0.50	0-2.00	0.30-0.50
Mn	0.80-1.50	0-2.00	0.80-1.50
Mo	1.00-2.00	0.20-12.00	1.00-2.00
Cr	1.50-3.50	0-7.00	1.50-3.50
Ni	0.50-1.50	0-4.00	0.50-1.50
W	0.50-2.50	0.20-12.00	0.50-2.50
V	0.15-0.30	0-3.00	0.15-0.30
Fe	Essential balance	Essential balance	Essential balance

Kishida et al. ('872) further disclose that the steel would have toughness in the transverse direction enhanced as close as to that of the toughness in the longitudinal direction so that a long tool life can be obtained, which would be a desirable characteristic of a support band (col. 1, line 66 – col. 2, line 21).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to utilize the tool steel, as disclosed by Kishida et al. ('872), for the steel for guide bars for chain saws that would be coated with nickel and chromium, as disclosed by Ball ('751), in order to have toughness in the transverse direction enhanced as close as to that of the toughness in the longitudinal direction so that a long tool life can be obtained, as disclosed by Kishida et al. ('872).

The Examiner notes that the steel composition disclosed by Kishida et al. ('872) overlaps the composition of the instant invention, which would be a prima facie case of obviousness. See MPEP 2144.05 I. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the desired amounts of carbon, silicon, manganese, molybdenum, chromium, nickel, tungsten, and vanadium from that of Kishida et al. ('872) because Kishida et al. ('872) disclose the same utility throughout the disclosed ranges.

Grazen ('525) discloses that diamonds (hard-material particles and organic) would be used as additive particles in nickel and chromium electroplating processes of wood-working tools such as cutting tools and saws to improve wear resistance, abrasion resistance, and the like (col. 1, line 55 – col. 2, line 27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the guide bars for chain saws as disclosed by Ball ('751) in view of Kishida et al. ('872), by including diamond particles as an additive to the nickel and chromium plating solutions, as disclosed by Grazen ('525) in order to improve corrosion resistance, abrasion resistance, and the like, as disclosed by Grazen ('525).

In regards to claims 34-36, Kishida et al. ('872) disclose 0.20 to 12.00 weight percent molybdenum and tungsten and 0 to 7.00 weight percent chromium, which overlaps 1.2 to 1.8 weight percent molybdenum, 1.2 to 1.8 weight percent tungsten and 1.5 to 2.5 weight percent chromium as claimed in the instant invention (col. 4, line 53 – col. 5, line 20).

Still regarding claims 35-36, it is well settled that there is no invention in the discovery of a general formula if it covers a composition described in the prior art, In re Cooper and Foley 1943 C.D. 357, 553 O.G. 177; 57 USPQ 117, Taklatwalla v. Marburg, 620 O.G. 685, 1949 C.D. 77, and In re Piling, 403 O.G. 513, 44 F(2) 878, 1931 C.D. 75. In the absence of evidence to the contrary, the selection of the proportions of elements would appear to require no more than routine investigation by those ordinary skill in the art. In re Austin, et al., 149 USPQ 685, 688. It would have been obvious to one of ordinary skill in the art to select amounts of molybdenum and tungsten in the claimed ratio from the ranges of molybdenum and tungsten disclosed by Kishida et al. ('872) because Kishida et al. ('872) disclose the same utility throughout the disclosed ranges.

In regards to claim 37, Ball ('751) discloses the difficulty to avoid plating the upper edges and a plating of a reduced thickness or none at all would be present at the groove bottom (col. 2, lines 37-47). Therefore, it would be expected that the plating could include up to the entire surface area of the steel, which would include the range of 10 to 60%.

In regards to claim 38, Ball ('751) in view of Kishida et al. ('872) and Grazen ('525) disclose a tool steel composition that overlaps the composition of the instant

invention; nickel plating the composition; and hard-material particles added to the nickel plating. Therefore, the claimed Vickers hardness of 450 to 550 would be expected. See MPEP 2112.01 I.

In regards to claim 39, Ball ('751) in view of Kishida et al. ('872) and Grazen ('525) do not specify that the hydrogen embrittlement (K) would be less than 10. However, Ball ('751) in view of Kishida et al. ('872) and Grazen ('525) disclose a tool steel composition that overlaps the composition of the instant invention; nickel plating the composition; and material particles added to the nickel plating. Therefore, the claimed K value of less than 10 would be expected. See MPEP 2112.01 I.

In regards to claim 40, Kishida et al. ('872) disclose a heat treatment that would include ingot soaking at 1200°C or higher for 10 hours, which overlaps the heat treatment of greater than 1150°C of the instant invention (Example 3).

Response to Arguments

Applicant's arguments with respect to claims 32-40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final

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action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessee Roe whose telephone number is (571) 272-5938. The examiner can normally be reached on Monday-Friday 7:30 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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